

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of                                  }  
Refai, Wail    }  
Serial No. 09/048,686                                }  
Filed: March 26, 1998                                 }  
For:   **BROADBAND COMMUNICATION  
SYSTEM USING POINT AND SHOOT  
APPROACH**    }  
Attorney's Docket No. P-4015.108                        }

S. Rao  
Examiner  
Group Art Unit 2661

Raleigh, North Carolina  
September 20, 2001

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Commissioner of Patents  
Washington, D.C. 20231

**Proposed Amendments for Discussion****Do Not Enter In File**

1. (Thrice Amended) A method of transmitting data in a digital communication system between a satellite [transmitting] relay station and a plurality of receivers, said transmitting method comprising:

a) [generating] receiving at said satellite relay station a primary data signal containing a plurality of primary data packets, each said primary data packet intended for a specific one of said receivers.

b) transmitting said primary data signal over a broadband channel to said plurality of [transceivers] receivers;

*broadcast*  
*index signal*

- c) transmitting an index signal over a narrow band channel from said satellite transmitting station to said plurality of receivers, wherein said index signal comprises a plurality of index data packets, each said index data packet corresponding to a respective one of said primary data packets and containing address information addressing a specific one of said receivers;
- d) receiving and decoding said index signal at said plurality of receivers;
- e) determining and selecting, at each said receiver, those primary data packets in said primary data signal that are intended for said receiver based on address information in said index data signals;
- f) extracting and decoding the selected primary data packets in said primary data signal at said plurality of receivers.

17. (Amended) A broadband communications system comprising:

- a) a satellite [transmitting] relay station including:
  - i) receiving means for receiving a broadband primary data signal; *& index signal*
    - [i] ii) first transmitting means for transmitting [a] said broadband [information] primary data signal to a plurality of receivers, wherein said broadband signal [having] includes a plurality of data packets each addressed to a selected receiver;
    - [ii] iii) a second transmitting means for transmitting [an] a narrow band <sup>index</sup> *on a narrowband* signal including addressing information for identifying the location of data packets in said broadband signal intended for a selected receiver and the start time of those packet(s) [in that receiver];

b) a plurality of receivers for receiving said [information] primary data signal and said index signal, each receiver including:

- i) a first signal processing means for demodulating and decoding said index signal to extract said addressing information;
- ii) a second signal processing means for demodulating and decoding said [information] primary data signal;
- iii) control means for selectively activating said second signal processing means based on addressing information in said index signal.

19. (Amended) A receiver for a broadband satellite communication system comprising:

- a) a first signal processing means for demodulating and decoding a received narrow band index signal to extract addressing information contained in said index signal;
- b) a second signal processing means for demodulating and decoding a received broadband [information] primary data signal;
- c) control means for selectively activating said second signal processing means based on addressing information in said index signal.

#### Remarks

Claim 1 has been amended to change satellite transmitting station to satellite relay station, and to add the method step of receiving the primary data signal at the relay station, prior to transmitting it to the receivers on a broadband channel.

The Examiner has indicated claim 8 is allowable with the proposed amendments.

Claim 17 has been amended to change transmitting station to relay station, and to add a receiving means for receiving the primary data signal.

These amendments fully address the Examiner's requirement that a satellite relay station be clearly claimed.

The subject matter of claim 19 is a receiver. It would be illogical to include details of the satellite (e.g., as a relay station or otherwise) in a receiver claim, just as, for example, a claim drawn to a cell phone would not include structural or operational details of the base station or tower antenna from which it receives its signals. A receiver constructed according to the present invention (*i.e.*, the block diagram of Fig. 4) is not physically or operationally limited to receipt of signals that are transmitted by a satellite relay station. Furthermore, no anticipatory non-satellite receiver has been cited in the prior art. However, to fully address the Examiner's concerns and in a good faith effort to move this case to allowance, Applicant has amended claim 19 to explicitly recite that the claimed receiver is for a satellite communications system.

Applicant believes that with the proposed amendments, all pending claims are in form for allowance. Upon concurrence by the Examiner, Applicant will submit these amendments in a supplementary response to the final office action.

Thank you, Examiner Rao, for your assistance in moving this case forward.

## COATS &amp; BENNETT, P.L.L.C.

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NOTES/COMMENTS:

DO NOT ENTER INTO FILE.

Examiner Rao,

I believe the attached amendments address all concerns as we discussed:

1. a satellite relay station formats the transmissions
2. index information is transmitted in a narrowband signal
3. data is transmitted in a broadband signal.

Please review the proposed amendments and contact me at your earliest convenience to discuss the disposition of the application.

Thank you,

